Building a Model of Support for Preschool Children with Speech and Language Disorders

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Received: April 19, 2016 Accepted: May 9, 2016 Online Published: June 14, 2016

doi:10.5539/jel.v5n3p173 URL: http://dx.doi.org/10.5539/jel.v5n3p173

Abstract

Speech and language disorders impede young children's abilities to communicate and are often associated with a number of behavioural problems arising in the preschool classroom. This paper reports a small-scale study that investigated 23 Australian educators' and 7 Speech Pathologists' experiences in working with three to five year old children with speech and language disorders. The participants responded to a questionnaire relating to the types of SaLD; social and emotional challenges experienced by children; their role in providing support and issues confronting both professions. The findings highlighted that educators play a valuable role in supporting children's speech and language disorders through the social context of the preschool classroom. Furthermore inter-professional practice between Speech Pathologists and educators was viewed as highly valuable. Drawing upon these findings, a model of support is presented to improve interventions for holistic development.

Keywords: early childhood, early years, inter-professional practice, intervention, language development, speech disorder

1. Introduction

Speech and Language Disorders (SaLD) are one of the most common learning difficulties affecting preschool aged children. In fact, it is reported that up to 25% of Australian children aged four to five years old experience a form of SaLD (Hay & Fielding-Barnsley, 2009; McLeod & Harrison, 2009). Speech and language are central to all areas of children's development and are inter-dependent on various aspects of social, cognitive and emotional behaviours (Sajaniemi, Suhonen, & Kontu, 2010). This means that speech and language competence open doors for children to develop social relationships, gather knowledge, form positive self-concepts and guide the acquisition of literacy skills (McCormack, Harrison, McLeod, & McAllister, 2011). Consequently, children with difficulties in using and understanding language are more likely than children without SaLD to experience difficulty in another developmental area including their social, emotional, cognitive and physical learning.

1.1 Social and Emotional Impacts of Speech and Language Disorders

The implications of SaLD on children's abilities to communicate can present further issues for their social and emotional development. For instance, Porter (2016) identified that a limited ability to communicate adversely affects children's abilities to develop relationships with both peers and adults. Moreover, children with SaLD often find it difficult to follow instructions, communicate their needs and may also be less able to self-regulate their emotions (Porter, 2016). Studies reveal that it is for these sorts of reasons, that children with SaLD experience anxiety and frustration at being misunderstood by others and often choose to withdraw from social interactions (McCormack, Mcleod, Harrison, & McAllister, 2010). A survey of 4,329 Australian primary school teachers and parents of children aged 7 to 9 years old, found that children identified as having a SaLD in preschool were 10% less likely to exhibit pro-social behaviours than those without (McCormack et al., 2011). Meanwhile, further research reports that up to 40% of children with SaLD demonstrated problematic behaviours, such as aggression (Daal, Verhoeven, & Balkom, 2007), withdrawnness from peers (Kok Yew Goh & O'Kearney, 2013) and found it difficult to gain control over their emotions (Teverovsky, Bickel, & Feldman, 2009). Without appropriate intervention that is holistically focussed towards SaLD, and social and emotional skill development, the child may be at risk of experiencing ongoing SaLD and engaging in anti-social behaviours into later childhood and adolescence.

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1.2 Intervention

1.2.1 Speech Pathologists

Educators recommend that children perceived as having a SaLD seek individualised intervention from a Speech Pathologist as these professionals are experienced in identifying and responding to children's SaLD. A significant amount of literature advocates that it is vital that children with SaLD receive intervention prior to beginning school to support their language development and to prevent the associated damaging effects of SaLD upon their academic, social and emotional skills (for example; Nathan, Stackhouse, Goulandris, & Snowling, 2004; Porter, 2016). Over the past decade there have been financial constraints and an inconsistency of funding within the health, disability and education systems in Australia resulting in insufficient resources to provide early intervention for all children in need of speech intervention (Commonwealth of Australia, 2014). This has left many children without the specialised speech and language support that they need (McLeod & Harrison, 2009; McAllister, McCormack, McLeod, & Harrison, 2011) and places increased responsibility upon children's preschool educators to implement intervention strategies to support children with SaLD in their classrooms.

1.2.2 The Early Childhood Education and Care Context

In Australia, early childhood settings provide education and care for children between ages birth to 8 years. Although children attend preschool between the ages of 4 to 6 years for a minimum of 15 hours a week, recent figures revealed that 16% of children spent 30 hours or more a week in a form of education and care (Australian Bureau of Statistics [ABS], 2011). Educators are expected to have a sound knowledge of child development, including children's speech, language and social-emotional learning. They also have the responsibility of planning and implementing curriculum. This includes designing a physical and social environment that affords opportunities for learning by responding to the needs, strengths and interests of children. Preschool curriculum in Australia is guided by the Early Years Learning Framework (EYLF) (Department of Education, Employment and Workplace Relations [DEEWR], 2009). The EYLF, supports the implementation of a play based curriculum, emphasising the development of positive social environments, relationships and inclusion for diversity. The EYLF acknowledges the importance of holistic learning and development, and emphasises that children are confident learners and effective communicators (DEEWR, 2009). This positions the educators with the important role of planning for and responding to children's speech and language needs.

Given the amount of time that children spend in the preschool classroom, educators are in a good position to identify symptoms of SaLD, seek specialist support if needed and to provide intervention. Moreover, the preschool classroom and its play based curriculum affords a natural environment where adults can guide children to connect with others to enhance their own levels of confidence, self-esteem and self-realisation (Nind, Flewitt, & Theodoru, 2014). This is important as Porter (2016) highlights that children are more likely to experience progress in their speech and language when they are in communication with more competent peers.

1.3 Partnerships

A growing body of research identifies collaborative practice between educators and Speech Pathologists as essential to improving language support for young children (Overby, Carrell, & Bernthal, 2007; Wong, 2014; Wong, Sumison, & Press, 2012). A study by McIntosh, Crosbie, Harrison and McAllister (2007) suggested that the existing congested system in Australia could be relieved by educators implementing programs developed by Speech Pathologists. The 97 preschool child participants were assessed by Speech Pathologists before undertaking two 10-week programs to enhance phonological awareness and language skills. The programs were developed collaboratively by the Speech Pathologists and educators, drawing upon knowledge each profession held of speech, language development and early childhood. Post assessments conducted by Speech Pathologists revealed significant improvement in children's phonological awareness, as well as improvement in language skills. In similar vein, others advocate that inter-professional practice of this kind is beneficial for developing language interventions (Wong, 2014; Wong et al., 2012). This is because each profession is empowered to draw upon their strengths to co-develop a single intervention plan, rather than two separate plans, in this way providing consistent strategies for the children and their families.

1.4 Focus of the Current Study

Despite research showing intervention for SaLD is most effective before the child enters school, much of the research focussing on teachers' perceptions and experiences of SaLD is in primary and secondary school settings (for example; Antoniazzi, Snow, & Dickson-Swift, 2010). Given that children in Victoria, Australia can be waiting 18 months to see a Speech Pathologist (McCormack et al., 2011), research is urgently needed to investigate how inter-professional collaboration can be utilised to provide children with greater access to

intervention. Increased access to intervention services would provide children with support for their speech and language, as well as other areas of their learning and development. The study reported here was developed to address this gap in the research by investigating the roles of Speech Pathologists and educators in providing intervention for preschool children with SaLD. The social environment of the preschool classroom provides an ideal context to explore the holistic strategies that can be used by preschool teachers to support children with SaLD. The study addresses the following three research questions:

- 1) Which SaLD are common amongst preschool children and what (if any) influence does it have on their behaviour?
- 2) How do professionals provide support to preschool children with SaLD?
- 3) In what ways do professionals work together to support children with SaLD?

2. Methods

2.1 Research Design

A questionnaire of 23 questions was developed to elicit information from educators and Speech Pathologists' about their experiences and perceptions of working with children with SaLD. The questionnaire specifically focused upon the following topics;

- 1) The types of SaLD that preschool children encounter.
- 2) The influence that SaLD has upon social and emotional development.
- 3) Their strategies used to support children with SaLD.
- 4) Their perception of their own capacity and skill to provide appropriate support for children with SaLD.
- 5) The importance of developing inter-profession partnerships between ECE & Speech Pathologists.

The questionnaire collected both quantitative and qualitative data. Quantitative data was collected through 14 multiple-choice questions. This data was analysed in Microsoft Excel using descriptive analysis to determine the mean, frequencies and standard deviation. Qualitative data was collected using nine open-ended short answer questions. This data was analysed using Kumar's (2011) four step process of content analysis;

- 1) Main themes were identified from the participant's responses. For example "Partnerships".
- 2) Coding was used to categorise the main themes.
- 3) Responses were classified under the main themes and then further analysed and categorised into sub-themes. For example; "Partnerships" had the following sub-themes; "Importance", "Practice" and "Barriers".
- 4) The themes and responses were interpreted and discussed.

2.2 Participants

Participants were sampled using a stratified scheme (Collins, Onwuebuguzie, & Jiao, 2006). In this scheme, potential participants who worked in Metropolitan Melbourne were sourced from the public online databases My Child (Australian Government, 2013) and Speech Pathology Australia (www.speechpathologyaustralia.org.au) and divided into two sub groups according to profession. Forty educators and forty Speech Pathologists were randomly selected and invited to participate by phone call.

In total, 23 educators (with a degree in Early Childhood Education) and seven Speech Pathologists (with a degree in Speech Pathology) chose to participate. All of the educators worked in community preschools in Victoria, Australia. Fifteen educators had more than 15 years' preschool teaching experience; five educators had 10-15 years' experience and three had less than 10 years. The Speech Pathologists were from public and private companies specialising in children's intervention in Victoria. Four Speech Pathologists had more than 15 years of experience and three had less than 10 years.

The University's Ethics Committee granted ethical approval for this research, and government approval to enter the early childhood services was given.

3. Results

3.1 Common SaLD and Their Influence upon Children's Behaviour

As presented in Figure 1, the educators reported that in their experience the most common SaLD among preschool children were difficulties in phonetics (100%) and pragmatics (73%). Speech pathologists however, reported that in their experience, young children with SaLD tended to experience all four impairments equally.

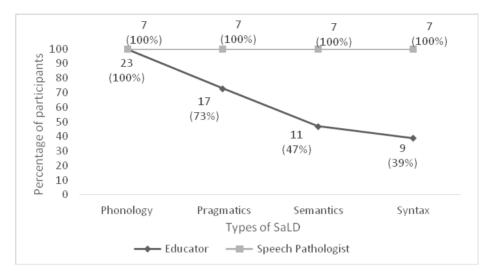


Figure 1. Common types of SaLD identified by participants

The educators strongly believed that these common SaLD were directly associated with social and emotional challenges (Figure 2). Specifically, withdrawal from social situations (89%) and a poor self-esteem (72%) were identified as common behaviours exhibited by children with SaLD. Furthermore, two thirds of the participating educators indicated that children with SaLD had difficulty controlling their emotions. Educators reported that children with SaLD might also display externalised behaviours, including aggression (65%).

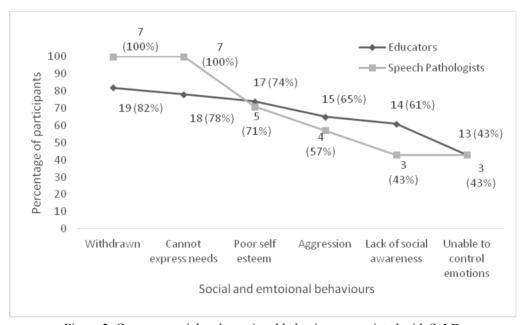


Figure 2. Common social and emotional behaviours associated with SaLD

This is evident in the following two comments from educators:

[&]quot;I have a child right now who is having trouble with their pronunciation. She will often hit the others when she doesn't know how to communicate that she doesn't like something."

[&]quot;It is common, very common (behavioural challenges). Mostly it is withdrawal I find, and low self-esteem. It can be difficult to have them to engage in social play."

In contrast, Speech Pathologists seemed uncertain of the influence that SaLD has on children's behaviour. Their comments suggested that other factors such as the child's personality and life experience may contribute to how the child copes with their SaLD. One Speech Pathologist stated;

"Different individuals with different personalities respond differently."

As educators work with the child with SaLD in a social setting, they were more likely to experience behavioural challenges in their professional practice with the children. However, they also agreed that individual circumstances can influence the effect that SaLD has upon behaviour:

"...it would depend on the severity of it. If a child's got pronunciation issues, with only a couple of sounds they aren't getting right then that won't effect their confidence or initiating interactions with other children."

"Some children show a number of social and emotional issues, however others do not. I guess it depends on their personality, the support that they are getting and the severity of the language problem."

3.2 Types of Support That the Professionals Provided for Children with SaLD

Participants from both professions identified ways that they supported children with SaLD. Their role in supporting children went beyond focussing on the development of speech and language, to also include strategies that facilitated the development of social and emotional skills. This supports the idea that areas of children's learning and development are holistically connected. There were however notable differences in the approaches taken by the two groups of professionals to support children with SaLD.

Most educators identified themselves as having an important role in supporting the social and emotional development of children with SaLD (78%). However, in contrast, a little over half of them (n = 56%) believed that their role in supporting children's speech and language development was important. A collection of quotes which are representative of the strategies that the educators employed to support the speech and language of children with SaLD are presented below. The main strategy was to engage children in social interactions to nurture the development of positive social and emotional skills. The educators commented that they used this social context to support children's speech and language by modelling correct language and helping children sound out or pronounce words.

"I provide (children) with extra support to initiate and join in play with peers."

"Engaging children in small group activities so I can guide their social interaction."

"Acting as an interpreter to help the child in social interactions with peers is important."

"I encourage social interactions by adding gestures and language to what the child is saying."

Speech Pathologists identified that the support they provided children with SaLD was influenced by their specialist knowledge of language. Consequently, in contrast to educators, the Speech Pathologists' primary aim was to work with children's speech and language development. Social and emotional development was a secondary outcome of their methods of support through the provision of activities centred on children's interests, developing positive relationships and building self-esteem through achievable speech and language support programs. Speech Pathologists also perceived a large part of their role to involve the provision of support to both the child and their family and to provide referrals to extra services. They indicated that working closely with parents to help them understand the nature of the impairment and how to respond was a key strategy.

"(My role is) Identification and assessment of the child's language skill development, then I support parents in implementing the strategies and provide necessary training."

"My focus is on providing the caregiver with information and support to enhance communication and learning opportunities within a naturalistic context."

"...visual support, understanding of language, training parents in language stimulation techniques and regular therapy to develop particular skills."

"I centre therapy around their (the child's) interests, teaching the child to socialise with peers in structured group activities."

"Helping the child to build self-esteem by designing programs that are achievable."

3.3 The Need for Professional Partnerships in Supporting Children with SaLD

All participants from both professions agreed that the development of a partnership between educators and Speech Pathologists was important in providing consistent strategies to assist children's speech and language development.

"Both sides working together will reinforce each other's work and lead to consistent strategies; we should have regular meetings for consistency." (Educator)

"I would like to work more closely with the children's teachers, as this would ensure consistency across settings." (Speech Pathologist)

Each acknowledged the expertise that the other professional could provide. In particular, Speech Pathologists identified the importance of the educator and the contextual capabilities that the preschool classroom provides as a naturalistic environment for children's speech and language to develop;

"We have the understanding of speech and language, however, early childhood educators are able to provide the environment where the child can extend their communication in appropriate social settings." (Speech Pathologist)

"I think that partnerships are important with early childhood educators because the social setting that the classroom provides for implementation of intervention strategies is beneficial for the child's progress." (Speech Pathologist)

The educators agreed that the preschool environment provided an ideal context for the strategies developed by Speech Pathologists to be practised;

"I provide a rich environment (for speech and language development) by implementing strategies provided by the speech therapist and role modelling language."

"I think that the children that I have would be benefitted if I worked alongside their Speech Pathologist. The classroom provides many social opportunities and with their guidance, I can really support the children's self-esteem and relationships with others."

All participants' from both professions agreed that working in partnerships was essential in supporting children's speech and language. Despite this agreement, only 11 of the 23 educators and three of the seven Speech Pathologists reported working in partnership with a member of the other profession in the past or present. Both professions identified lack of sufficient "time" as the main barrier to creating collaborative relationships.

In commenting on partnerships an issue raised by both professionals was the need for educators to enhance their knowledge of SaLD through professional learning. Speech Pathologists believed educators required more knowledge about identifying SaLD;

"The teachers that I have worked with are very open to my suggestions. However I think that the issue is that it is taking too long for them to identify a delay."

Meanwhile, educators acknowledged that they would benefit from increased knowledge relating to the processes for seeking assistance from Speech Pathologists and the implementation of strategies to support children's speech and language:

"I don't feel confident in the amount of knowledge that I have to support children's language. I don't feel like I am making a difference."

"I have a number of children that need help with their language, however I don't know how to support them, or where to refer them to."

The participants suggested a number of ways in which this professional learning for educators about SaLD could take place. Preference from both professions was for educators to undertake a professional learning program conducted by a Speech Pathologist. This would also work to strengthen the working partnerships between the professions.

4. Discussion

This study found that both the educators and Speech Pathologists perceived preschool children with SaLD to be at risk of displaying behavioural challenges. Therefore the professionals identified that they have important roles in supporting children's speech and language, as well as social and emotional skills. Although the study is limited by a small sample size which means that the findings cannot be generalised to the wider population of Australia, the findings present a unique insight into intervention and support for children with SaLD. Each profession identified their expertise and role in supporting children with SaLD, highlighting the use of different, but complementary strategies to support the children's development and wellbeing. Speech Pathologists largely focussed upon children's language needs and supporting parents, whilst educators focussed on the child in the social context provided by the classroom. Both professions valued each other's expertise and experience, and

saw the potential of working together to support the child. This illuminates the importance of developing a close partnership between the professions to build an effective model of support.

4.1 Building a Model of Support

This study found that professionals from both areas agreed that more effective support for children with SaLD would essentially involve three aspects;

- a) Support for children in the preschool classroom
- b) Support through collaborative partnerships
- c) Support through professional learning

4.1.1 Support for Children in the Preschool Classroom

The findings highlighted that children with SaLD commonly experienced social and emotional challenges. Accordingly, the importance of providing children with interventions that holistically supported speech and language skills, as well as social and emotional competencies was identified. Naturalistic settings that draw upon children's interests in play-based situations, often involving interactions with others were valued. These findings highlight the important context that the *play based curriculum* in Australian preschools can afford for children with SaLD. Play experiences in the preschool classroom provide the opportunity for children to develop a positive sense of self through the expression of ideas and feelings (Frost, Worthham, & Reifel, 2012).

Purposeful teaching moments guided by the teacher target speech, language, emotional and social skills in a holistic manner by helping children to express their ideas and feelings with others. The importance of this support is that as children improve their social skills, they are more likely to be involved in small and large group play with peers, thereby improving their speech and language skills through increased communication with others (Porter, 2016). Speech Pathologists viewed these purposeful teaching moments occurring within the classroom context as beneficial for children's SaLD, to complement or supersede any individual therapy sessions conducted.

4.1.2 Support through Collaborative Partnerships

Although the findings identified that the classroom context provided valuable support to children, the participants in both professions raised concern that the educators lacked confidence and knowledge to effectively support the speech and language needs of children with SaLD. All participants identified that working collaboratively would strengthen the support provided to children within the classroom context. Therefore, we recommend that educators seek to develop productive working partnerships with Speech Pathologists (and vice versa) so that each professional can contribute their specialist skills and knowledge to develop an appropriate teaching intervention plan for a child with SaLD. This has implications for educators who plan and enact the preschool curriculum, and also for the Speech Pathologists who can be involved in planning strategies and providing support to the educators.

This concurs with Wong's (2014) findings that children's speech and language intervention can be enhanced through inter-professional practice where the expertise of each profession is used to plan and implement programs of support for the child. Moreover, such a working relationship has been shown to have positive gains in children's language development and has been suggested to relieve the waiting list of families accessing Speech Pathologists in the long run (McIntosh et al., 2007). However, the findings of the current study highlight that even though the participants saw the benefit of working collaboratively with each other, insufficient time prevented this partnership from developing in everyday practice.

Given that Speech Pathologists acknowledged the benefit of a naturalistic setting for children's speech and language development, it would be valuable that they observe the child's language and social behaviour in their preschool classroom. This is an important starting point for working collaboratively with educators to develop effective support strategies (Nungesser & Watkins, 2005). Additionally, regular meetings between Speech Pathologists and educators could be conducted by phone as a means of developing and maintaining a collaborative partnership in supporting children that they both work with. This study has highlighted the need for further research to investigate how effective, close partnerships can be developed and maintained between educators & Speech Pathologists in a system where both professions feel their efforts are seriously inhibited by "lack of time".

4.1.3 Support through Professional Learning

In other studies, it has been found similarly that educators lacked confidence in supporting children with SaLD. However the current study highlights that educators specifically require professional learning that targets the identification of SaLD, their role in supporting children's language and the processes of seeking assistance. The implications of this is that educators need to develop sufficient knowledge to be able to identify children with speech and language difficulties early on in their work with young children. They also need to know how to get support from Speech Pathologists and how to select and implement appropriate intervention strategies.

This implicates higher education institutions and other course providers offering degrees in early childhood education to ensure that pre-service educators are equipped with sufficient foundational knowledge and skills to assist them in developing a basic knowledge of SaLD. Course providers may benefit from consulting and working collaboratively with Speech Pathologists when designing units of study about children's language development in their teaching courses. A further recommendation from these findings is that the provision of professional learning workshops conducted by Speech Pathologists would be of benefit to educators already in the workplace.

5. Conclusion

The study illustrated that educators and Speech Pathologists acknowledge the importance of holistic intervention where support is given to both speech and language and the child's development of social and emotional skills. Participants from both professions acknowledged that the preschool classroom affords children the opportunity to practice communicative skills in a supportive social environment, therefore providing the context for holistic intervention to occur.

The development of collaborative partnerships between Speech Pathologists and educators is an essential aspect of building an effective model of support for children and their families. Furthermore, professional learning for educators that targets the identification of SaLD and strengthens partnerships with Speech Pathologists is important. If addressed, the implications arising from this study have the potential to provide preschool children with improvements in the quality of intervention support, which may have benefits for their language, social, emotional and academic development in their present and future lives.

References

- Antoniazzi, D., Snow, P., & Dickson-Swift, V. (2010). Teacher identification of children at risk for language impairment in the first year of school. *International journal of speech-language pathology*, *12*(3), 244-252. http://dx.doi.org/10.3109/17549500903104447
- Australia Bureau of Statistics (ABS). (2011). 2011 census quick stats. Retrieved February 29, 2016, from http://www.censusdata.abs.gov.au/census_centres/getproduct/census/2011/quickstat/2GMEL
- Australian Government. (2013). *My Child*. Retrieved February 29, 2016, from http://ifp.mychild.gov.au/mvc/Search/Advanced
- Collins, K., Onwuegbuzie, A. J., & Jiao, Q. G. (2006). Prevalence of mixed methods sampling designs in social science research. *Evaluation and Research in Education*, 19(2), 83-101. http://dx.doi.org/10.2167/eri421.0
- Commonwealth of Australia. (2014). Prevalence of different types of speech, language and communication disorders and speech pathology services in Australia. Retrieved February, 29, 2016, from http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Community_Affairs/Speech_Pathology/Report
- Daal, V. J., Verhoeven, L., & Van Balkom, H. (2007). Behaviour problems in children with language impairment. *Journal of Child Psychology and Psychiatry*, 48(11), 1139-1147. http://dx.doi.org/10.1111/j.1469-7610.2007.01790.x
- Department of Education, Employment and Workforce Relations (DEEWR). (2009). *Belonging, being and becoming: The early years learning framework for Australia*. Canberra, Australia: Commonwealth Government.
- Frost, J., Wortham, S., & Reifel, S. (2012). Play and child development (4th ed.). New Jersey: Pearson Education.
- Hay, I., & Fielding-Barnsley, R. (2009). Competencies that underpin children's transition into early literacy. *Australian Journal of Language & Literacy*, 32(2), 148-162.
- Kumar, R. (2011). Research methodology: A step-by-step guide for beginners (3rd ed.). Los Angeles, SAGE.

- McAllister, L., McCormack, J., McLeod, S., & Harrison, L. J. (2011). Expectations and experiences of accessing and participating in services for childhood speech impairment. *International Journal of Speech-Language Pathology*, *13*(3), 251-267. http://dx.doi.org/10.3109/17549507.2011.535565
- McCormack, J., Harrison, L. J., McLeod, S., & McAllister, L. (2011). A nationally representative study of the association between communication impairment at 4-5 years and children's life activities at 7-9 years. *Journal of Speech, Language and Hearing Research*, 54(5), 1328-1348. http://dx.doi.org/10.1044/1092-4388(2011/10-0155)
- McCormack, J., McLeod, S., Harrison, L. J., & McAllister, L. (2010). The impact of speech impairment in early childhood: Investigating parents' and speech-language pathologists' perspectives using the ICF-CY. *Journal of Communication Disorders*, 43(5), 378-396. http://dx.doi.org/10.1016/j.jcomdis.2010.04.009
- McIntosh, B., Crosbie, S., Holm, A., Dodd, B., & Thomas, S. (2007). Enhancing the phonological awareness and language skills of socially disadvantaged preschoolers: An interdisciplinary programme. *Child Language Teaching and Therapy*, 23(3), 267-286. http://dx.doi.org/10.1177/0265659007080678
- McLeod, S., & Harrison, L. J. (2009). Epidemiology of speech and language impairment in a nationally representative sample of 4- to 5-year-old children. *Journal of Speech, Language and Hearing Research*, 52(5), 1213-1229. http://dx.doi.org/10.1044/1092-4388(2009/08-0085)
- Nathan, L., Stackhouse, J., Goulandris, N., & Snowling, M. J. (2004). The development of early literacy skills among children with speech difficulties: A test of the critical age hypothesis. *Journal of Speech, Language and Hearing Research*, 47(2), 377. http://dx.doi.org/10.1044/1092-4388(2004/031)
- Nind, M., Flewitt, R., & Theodorou, F. (2014). Play and inclusion. In K. Cologne (Ed.), *Inclusion in the early years: Right from the start* (pp. 341-359). South Melbourne, Australia: Oxford University Press.
- Nungesser, N. R., & Watkins, R. V. (2005). Preschool teachers' perceptions and reactions to challenging classroom behavior: Implications for speech-language pathologists. *Language, Speech, and Hearing Services in Schools*, *36*(2), 139-151. http://dx.doi.org/10.1044/0161-1461(2005/013)
- Overby, M., Carrell, T., & Bernthal, J. (2007). Teachers' perceptions of students with speech sound disorders: A quantitative and qualitative analysis. *Language, Speech, and Hearing Services in Schools*, 38(4), 327-341. http://dx.doi.org/10.1044/0161-1461(2007/035)
- Porter, L. (2016). *Young children's behaviour: Guidance approaches for early childhood educators* (4th ed.). New South Wales, Australia: Allyn & Unwin.
- Sajaniemi, N., Suhonen, E., & Kontu, E. (2010). Verbal and non-verbal development in SLI children after early intervention. *Early Child Development and Care*, *180*(4), 519-534. http://dx.doi.org/10.1080/03004430802090679
- Teverovsky, E. G., Bickel, J. O., & Feldman, H. M. (2009). Functional characteristics of children diagnosed with Childhood Apraxia of Speech. *Disability and Rehabilitation*, *31*(2), 94-102. http://dx.doi.org/10.1080/09638280701795030
- Wong, S. (2014). Inter-professional practice to support inclusion. In K. Cologne (Ed.), *Inclusion in the early years: Right from the start* (pp.189-209). South Melbourne, Australia: Oxford University Press.
- Wong, S., Sumsion, J., & Press, F. (2012). Early childhood professionals and inter-professional work in integrated early childhood services in Australia. *Australasian Journal of Early Childhood*, 37(1), 81-88.
- Yew, S. G. K., & O'Kearney, R. (2013). Emotional and behavioural outcomes later in childhood and adolescence for children with specific language impairments: Meta-analyses of controlled prospective studies. *Journal of Child Psychology and Psychiatry*, *54*(5), 516-524. http://dx.doi.org/10.1111/jcpp.12009

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